**Developmental / Epileptic Encephalopathy with Spike Wave Activation on Sleep (DEE-SWAS)**

**What Is DEE-SWAS?**

DEE-SWAS is a rare type of epileptic encephalopathy. In 2022 the International League Against Epilepsy updated the nomenclature of several childhood epilepsy syndromes and now the term DEE-SWAS includes a spectrum of conditions characterized by cognitive, language and behavioral symptoms. Patients with Landau-Kleffner syndrome, atypical benign partial epilepsy (pseudo-Lennox syndrome) and epilepsy with continuous spike-wave during sleep (CSWS) or electrographic status epilepticus of sleep (ESES) are now classified as having DEE-SWAS.

Children with the condition will have:
- Different types of seizures
- Variable degrees of language and cognitive regression
- Behavioral issues
- Spike-wave activation during sleep on EEG

DEE-SWAS begins between 2 - and 12-years-old, and the course of the disease is variable. Antiseizure medication often controls seizures; but language, cognitive, and behavior issues are more difficult to treat. EEG usually improves during adolescence and is accompanied by cognitive and behavioral improvement.

**What Kinds of Seizures Happen in DEE-SWAS?**

There are different seizure types in DEE-SWAS. They can cause a variety of symptoms.

**Focal seizures:**

In this type of seizure, a child:
- Has rhythmic jerks (clonic movements) in one part of the body
- Stares and is unresponsive

This type of seizure can also evolve to a convulsion (bilateral tonic-clonic seizure)

**Tonic-Clonic Seizures**

In this type of seizure, a child:

- Has convulsions, or rigid muscles and rhythmic body jerks
- Rolls the eyes back
- Cries out
- May pee or poop
- Can't respond during seizure
- Is confused and sleepy after the seizure

**What Causes DEE-SWAS?**

DEE-SWAS can be caused by multiple conditions such as genetic mutations, brain malformations or perinatal injuries. Frequently no specific cause can be identified.

**How Is DEE-SWAS Diagnosed?**

A pediatric neurologist (a doctor who treats brain, spine, and nervous system problems) can diagnose the condition by doing tests such as:

- EEG
- VEEG, or video electroencephalography (EEG with video recording)
- MRI

**How Is DEE-SWAS Treated?**

Seizures in DEE-SWAS are treated with antiseizure medications. Some patients may need steroids.
How Can Parents Help?

Caring for a child with DEE-SWAS can be challenging. Work with your child's care team to set up medical visits, therapies and a treatment plan that provides your child with a good quality of life.

Make sure that you and other adults and caregivers (family members, babysitters, teachers, coaches, etc.) know what to do during a seizure. Because it could lead to a generalized tonic-clonic seizure, your doctor may prescribe an emergency medication to give if your child has a long seizure or many seizures in a short amount of time. Be sure to ask your doctor about a seizure rescue plan for your child.

What Else Should I Know?

If your child has epilepsy, your doctor and the care team can answer questions and offer support. They also might be able to recommend a local support group. Online organizations can help too, such as:

- Epilepsy Foundation
- CDC – Managing Epilepsy